

Amendments to the Specification:

Please amend the paragraph on page 1, lines 10-19 with the following amended paragraph:

In exploration as well as in development, when a hydrocarbon-rich level is discovered during drilling, it is very important for the operator to know the type of fluids present in the formation (oil, gas, condensate, heavy oil, etc.) or, even better, the volume ratio of gas to oil in the fluids of a well. This information is currently available only by means of formation tests, which requires drilling stop, as described in for example U.S. Patent Nos. 5,635,631 and 5,612,493, and represents a considerable cost for the operator. It is therefore clear that an approximation of this GOR during drilling would be an important "plus" for the operator because this information would allow to better apprehend the economical interest of the potential deposit and would lead to a better evaluation of the rest of the drilling operation (drilling stop or continuation, absence or start of production tests).

Please add the following new paragraph on page 2, after line 20:

BRIEF DESCRIPTION OF THE DRAWING

The sole drawing figure is a flow chart showing the method for estimating the volume ratio of gas to oil (GOR) in the fluids of a well during drilling according to the present invention.

Please replace the paragraph on page 3, line 2 with the following amended paragraph:

DETAILED DESCRIPTION

It may be reminded that the GOR (gas/oil ratio) is defined by the relation $GOR = V_g/V_o$, where V_g and V_o are respectively the volumes of gas and of oil produced at

the surface under standard conditions. The method is shown in the sole drawing figure which is a flow chart showing the basic steps of the method as follows.